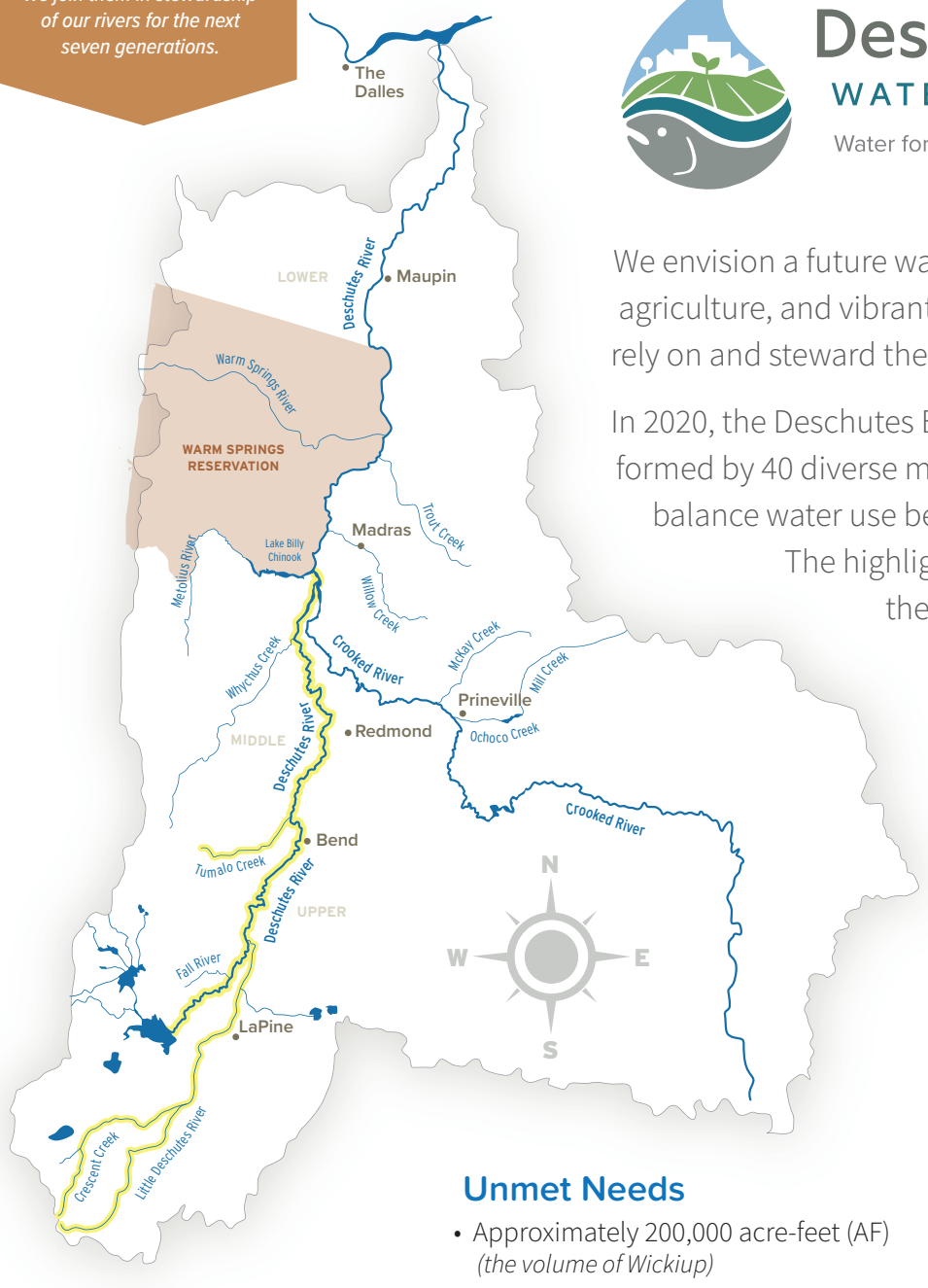
We honor the native people who have called this region home for thousands of years.

We join them in stewardship of our rivers for the next seven generations.

Deschutes Basin
WATER COLLABORATIVE

Water for Rivers, Agriculture and Communities



We envision a future watershed with healthy streams, thriving agriculture, and vibrant, connected communities that both rely on and steward the water resources in the basin.

In 2020, the Deschutes Basin Water Collaborative (DBWC) was formed by 40 diverse members who are working together to balance water use between human and ecological needs. The highlighted area on the map is phase one of the DBWC's focus.

Issues

- Low and altered streamflows
- Water quality
- Increased water temperatures
- Prolonged, exceptional drought
- Degraded habitat
- Threatened species
- Water use inefficiency
- Uneven and unreliable water supply
- Climate change

Unmet Needs

- Approximately 200,000 acre-feet (AF) *(the volume of Wickiup)*
- Up to 400,000 AF in dry years

The basin is working to secure sufficient water supply (acre-feet) to meet current and future water needs for agriculture and cities and to restore instream flows (cubic feet per second) in specific reaches. Total annual inflows to the basin amount to 860,000 to 2.3 million AF.

Basin Progress

- Success through collaboration
- Nearly 300 cfs restored in key reaches
- Increased agricultural reliability
- Some future water supply secured for municipalities

Healthy Streams

Restore flows in the Deschutes River and its tributaries. Water quantity and quality to support fish, frogs, and other wildlife.

+

Thriving Agriculture

Support irrigated agriculture by promoting water equity and increased efficiency so that production in Central Oregon remains viable.

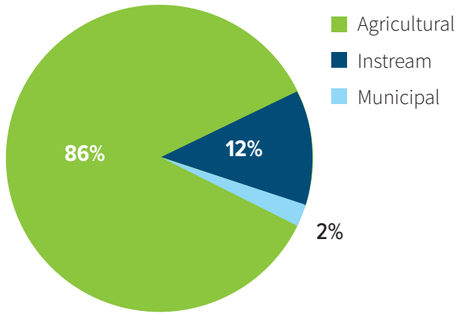
+

Vibrant Communities

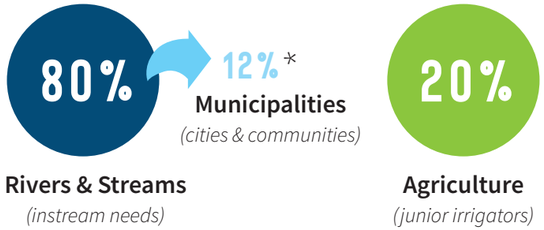
Enough water to secure and maintain a safe, affordable, and high-quality water supply for urban communities in one of the fastest growing regions in the country.

Where water *currently goes* and where there are *unmet needs*

Current distribution of water rights:



Over the next 50 years, projected unmet needs:



* Since groundwater and surface water are interconnected, **municipal needs** are incorporated into unmet instream needs because water must be dedicated instream to mitigate for groundwater pumping.

A HISTORY OF *Working Together*

CASE STUDY: Whychus Creek

Since the early 1900s, Whychus Creek ran dry in two out of every three years due to irrigation diversions. Through a combination of instream transfers from urbanizing lands, instream leasing from fallowing acres, irrigation efficiency from on farm improvements, and canal piping, the creek is now well on its way to achieving the flows necessary for reintroduced steelhead and salmon. Continued investments in streamflow projects have a direct effect on other indicators of river health, such as improved habitat availability and lower water temperatures.

Municipalities

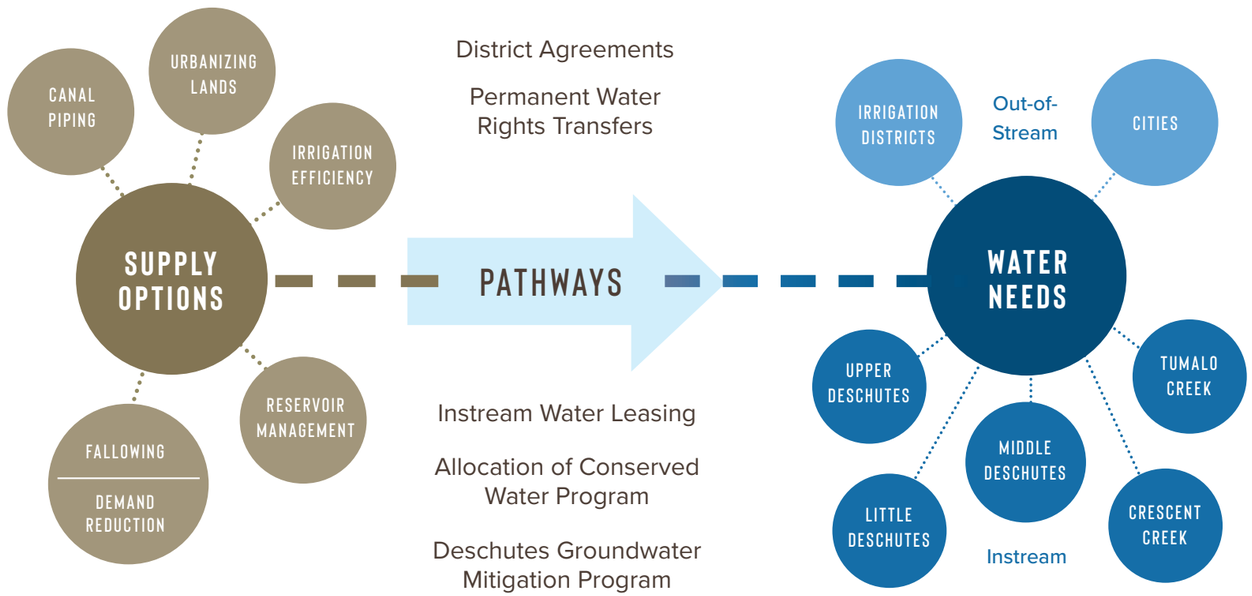
Permanent instream transfers under the Deschutes Basin Mitigation Program have created 6,000 acre-feet of mitigation credits for new groundwater permits for municipal, irrigation, and other uses in the Upper Deschutes Basin. Meeting the projected 50-year demands of municipal water suppliers in the basin will require that an additional 16,000 AF of water be dedicated instream for groundwater mitigation.

Agriculture

Junior irrigation districts experience water shortages (30,000 – 160,000 AF), particularly in dry years. Basin partners are focusing on utilizing the tools to conserve water in senior irrigation districts and boost the reliability of junior water rights. Accomplishing this enables winter flow restoration in the Upper Deschutes.

SOLUTIONS

Tools to *get water where it's needed*



The DBWC has an Instream Committee that is assessing existing information on the biological flow needs across the basin, which are discussed below.

Upper Deschutes

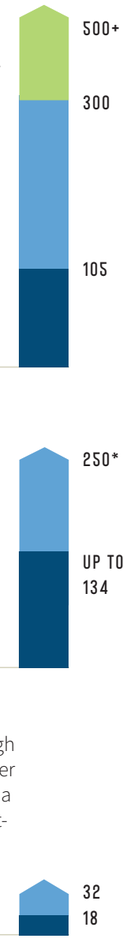
Winter flows in the Upper Deschutes have increased from a minimum of 20 cfs to a minimum of 100 cfs. State instream water rights based on minimum needs for fish are 300 cfs. Habitat Conservation Plan flow targets include 300 cfs by 2028 and 400-500 cfs by 2033. Flows are needed to support river function, redband trout, and Oregon spotted frog in a federally designated Wild and Scenic River.

Middle Deschutes

Up to 134 cfs have been restored instream in the Middle Deschutes; 28 cfs from instream leasing and 106 cfs from transfers and conserved water projects, though these flows are lower in the spring and fall. Basin partners are working towards a minimum instream flow goal of 250 cfs to support redband trout habitat, while recognizing that biological flow needs may be higher.

Tumalo Creek

Up to 26 cfs has been restored in Tumalo Creek through a combination of instream leasing and conserved water projects. Basin partners are working towards meeting a minimum instream flow goal of 32 cfs, which is important for restoring redband trout habitat and meeting temperature goals in Tumalo Creek and the Middle Deschutes River. Biological flow needs are higher.



** State instream water rights are pending in the Middle Deschutes*
Measurements in cubic feet per second (cfs)

Deschutes Basin Water Collaborative *Priority Actions*

Accelerate Implementation

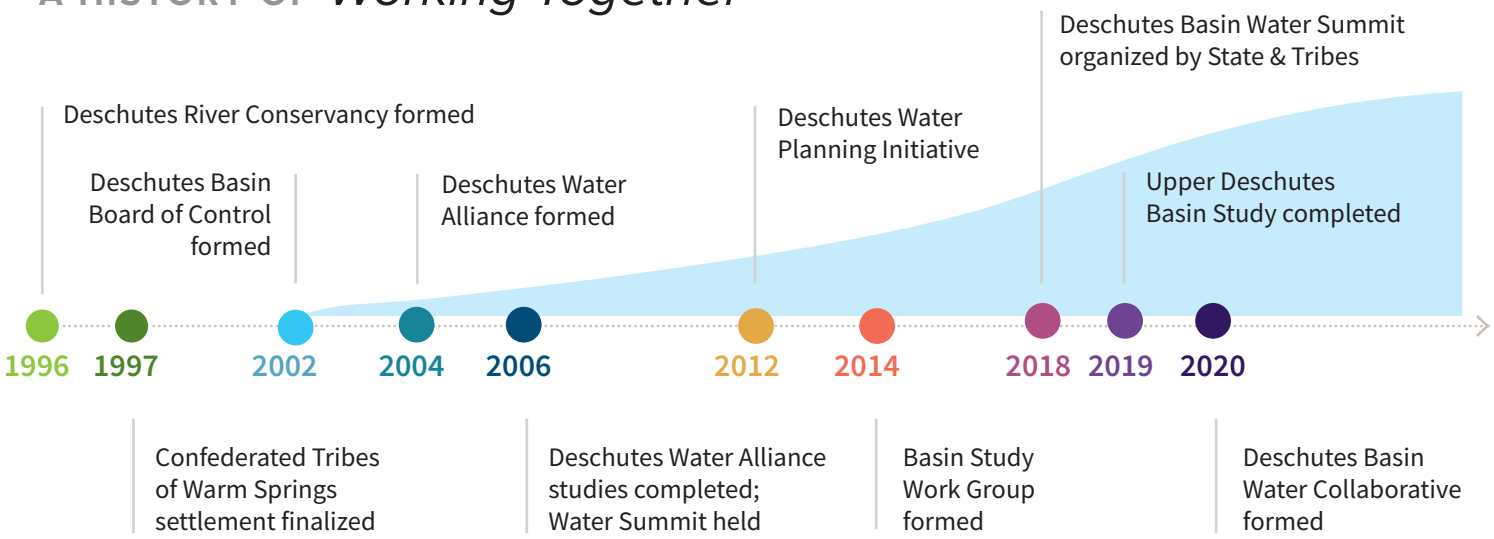
Develop a Comprehensive Water Management Plan

Leverage Funding

Support Policies that Advance DBWC Goals and Consensus Agreements

Moving Forward:
Expand forum to address issues in other river reaches and tributaries

A HISTORY OF *Working Together*



Deschutes Basin Water Collaborative **Members**

Oregon Governor's Office
Oregon Dept. of Agriculture
Oregon Dept. of Environmental Quality
Oregon Dept. of Fish & Wildlife
Oregon Water Resources Dept.
US Fish & Wildlife Service
US Forest Service
Oregon Environmental Council
Arnold Irrigation District
Central Oregon Irrigation District
Lone Pine Irrigation District
North Unit Irrigation District
Deschutes Soil & Water Conservation District
Central Oregon Intergovernmental Council
Confederated Tribes of Warm Springs
League of Women Voters – Deschutes County
Central Oregon Cities Organization
Avion Water Company
Ochoco Irrigation District
Water for Life
City of Bend
City of La Pine
City of Prineville
City of Redmond
Crook County
Jefferson County
Central Oregon LandWatch
Central Oregon Informed Angler
Crooked River Watershed Council
Deschutes River Conservancy
Great Old Broads for Wilderness
Oregon Natural Desert Association
Oregon Sierra Club – The Juniper Group
Sunriver Anglers
Trout Unlimited – Deschutes Redband Chapter
Trout Unlimited (State Office)
Upper Deschutes Watershed Council
WaterWatch of Oregon
Portland General Electric
Coalition for the Deschutes

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